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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/017,798	12/12/2001	Valentin Kramer	31567.3	9144
5251	7590	08/31/2005	EXAMINER	
SHOOK, HARDY & BACON LLP 2555 GRAND BLVD KANSAS CITY,, MO 64108			CHANG, VICTOR S	
			ART UNIT	PAPER NUMBER

1771

DATE MAILED: 08/31/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/017,798

Applicant(s)

KRAMER ET AL.

Examiner

Victor S. Chang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 August 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 19-27 and 32-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 19-27 and 32-36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Introduction

1. The Examiner has carefully considered Applicants' amendments and remarks filed on 8/11/2005. Applicants' amendments to claims 19, 24-27 and 32, cancellation of claims 28-31, and new claims 33-35 have been entered.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
3. Rejections not maintained are withdrawn.

Claim Rejections - 35 USC § 112

4. Claims 19-27 and 32-36 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

More particularly, the Examiner repeats (see Advisory dated 7/12/2005) that the amendment to independent claim 19 now recites limitations "a consistently repeated pore configuration" and "said first and second size ranges being identifiably distinct", but Applicants fail to point out any support in the specification, nor the Examiner find such limitations inherent to an expanded PTFE membrane, as such they appear to be new

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matter and Applicant is required to either cancel new matter or provide a clear support in the next reply.

Similarly, for independent claim 32, the Examiner repeats that the limitations “a regularly repeated pore configuration” and “second plurality of pores being discrete from and smaller than said first plurality of pores” appear as new matter, and Applicant is required to either cancel new matter or provide a clear support in the next reply.

5. Claims 19-27 and 32-36 are rejected under 35 U.S.C. 112, first paragraph, as based on a disclosure which is not enabling. The physical characteristics which is critical or essential to the practice of the invention, but not included in the claim(s) is not enabled by the disclosure. See *In re Mayhew*, 527 F.2d 1229, 188 USPQ 356 (CCPA 1976).

More particularly, in independent claims 19 and 32, the newly add limitations “said configuration created by forming a mixture of a first resin and a second resin having a different expandability characteristic than said first resin” and “a first material mixed with a second material to comprise a compound, said second material being less expandable than said first material”, respectively, are each considered to be too broad and in excess of provided enablement in the specification, since the property recitation purports to cover any conceivable combination of ingredients either presently existing or which might be discovered in future and which would impart desired characteristics, but are unobvious to the instantly claimed invention, and the recitation also appears to read upon materials that could not possibly be used to form the contemplated genus or subgenus of articles. As a result, undue experimentation would be required to formulate

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suitable compositions for this claim or to determine what would or would not infringe.

Ex parte Slob (PO BdApp) 157 USPQ 172.

6. Claims 19-27 and 32-36 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

More particularly, for independent claims 19 and 32, the newly add limitations “said configuration created by forming a mixture of a first resin and a second resin having a different expandability characteristic than said first resin” and “a first material mixed with a second material to comprise a compound, said second material being less expandable than said first material”, respectively, are vague, indefinite, functional, and fails to give notice as to what constitutes infringement upon the instantly claimed invention. It should be noted that claims merely setting forth physical characteristics desired in article, and not setting forth specific structure and/or compositions which would meet such characteristics, either in the claim or specification, are invalid as vague, indefinite, and functional, since it recites compounds by what it is desired that they do rather than what they are, and resulting in a claim scope that is indefinite since one of skill in the art is unable to determine without undue experimentation what compounds are included or excluded therefrom. As such, it is unclear as to what is the scope of the invention of which Applicant intends to claim. *Ex parte Slob* (PO BdApp) 157 USPQ 172.

Additionally, in claims 19 and 32, the term “different expandability” and “less expandable”, respectively, are relative terms which render the claim indefinite.

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Specifically, the terms "different expandability " and "less expandable" are not defined by the claim, and the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. In particular, the Examiner reminds Applicants that *any* expanded PTFE has a distribution of void sizes, and *inherently* locally there is "different expandability" and "less expandable" resins surrounding neighboring pores of different sizes. Appropriate clarification in the next reply is requested.

Rejections Based on Prior Art

7. Claims 19-22 and 32-36 are rejected under 35 U.S.C. 102(a) as being anticipated by Edwin et al. (US 6039755), generally as set forth in section 10 of Office action dated 4/14/2005, together with the following additional reasoning.

First, for the purpose of clarification, the Examiner repeats the relied upon prior art as follows: Edwin's invention is directed to expanded microporous tubular polytetrafluoroethylene (ePTFE) grafts (abstract), which has a microstructure of nodes interconnected by fibrils, with the nodes being substantially perpendicular to the longitudinal axis of the tubular ePTFE material and the fibrils being oriented parallel to the longitudinal axis of the tubular ePTFE material, and radial expansion deforms the ePTFE microstructure by elongating the nodes. (column 2, lines 42-49). While each embodiment shown by Edwin in Figs. 5A-24D appears to read on the structural recitation of instant invention as claimed, the embodiments shown in Figs. 18D, 21B

and 21D are particularly commensurate with the microstructure of the Fig. 2 of instant application.

With respect to newly added limitations in independent claims 19 and 32 "said configuration created by forming a mixture of a first resin and a second resin having a different expandability characteristic than said first resin" and "a first material mixed with a second material to comprise a compound, said second material being less expandable than said first material", the Examiner respectfully reminds Applicants that, in the absence of a clear definition of what constitutes "first resin" or "second resin", *any* expanded PTFE has a distribution of void sizes, and *inherently* locally there are resins of "different expandability" or "less expandable" surrounding neighboring pores of different sizes.

For new claims 33 and 34, the Examiner repeats that Edwin shows in Figs. 5A-24D microstructures read on instant invention as claimed, as set forth above.

Claims 19-22 and 32-34 lack novelty.

Finally, for new claims 35 and 36, since they claim the same scope of elements and limitations as claims 19-22 and 32-34, they are also rejected for the same reasons as set forth above.

8. Claims 24-27 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Edwin et al. (US 6039755), generally as set forth in section 11 of Office action dated 4/14/2005, together with the additional reasoning as set forth above.

9. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Edwin et al. (US 6039755) in view of Myers et al. (US 5628782), generally as set forth in section 12 of Office action dated 4/14/2005, together with the additional reasoning as set forth above.

Response to Argument

10. With respect to Applicants' argument "Both Edwin methods of making and the resulting product of Edwin are different ... Edwin uses only one PTFE resin at a time" (Remarks, page 6, second paragraph), the Examiner repeats that, in the absence of a clear definition of what constitutes "first resin" or "second resin", *any* expanded PTFE has a distribution of void sizes, and *inherently* locally there are resins of "different expandability" or "less expandable" surrounding neighboring pores of different sizes. In other words, the Examiner asserts that Edwin discloses the invention as claimed, Applicants' argument to the contrary notwithstanding.

Applicants' arguments "Edwin ... reveals resulting structures are starkly different ... All these images show articles having uniform internodal distances between elongated nodes ... this uniformity is the chief objective of the patent ... There is no mention of distinct groups of pores. Any deviations in Edwin's micrographs which stray from uniform internodal distances are an aberration contrary to the goals of the patent" (Remarks, page 6, 4th paragraph) have been carefully considered, but are not persuasive. First, Applicants appear to be either agreeing that Edwin's micrographs do show uniform internodal distances between elongated nodes as claimed, or have

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confused about the differences between Edwin's invention and the instant invention, if there is any. Second, while Edwin is silent about "distinct groups of pores", the Examiner asserts that each embodiment shown by Edwin in Figs. 5A-24D appears to read on the structural recitation of instant invention as claimed, and the embodiments shown in Figs. 18D, 21B and 21D are particularly commensurate with the microstructure of the Fig. 2 of instant application. In other words, Applicants appears to argue that the instant does not have "distinct groups of pores" either. Applicants' argument is without merit to the present rejection.

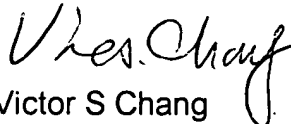
Conclusion

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Victor S. Chang whose telephone number is 571-272-1474. The examiner can normally be reached on 8:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel H. Morris can be reached on 571-272-1478. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Victor S Chang
Examiner
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8/29/2005